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Notice of Allowability	Application No.	Applicant(s)	
	10/690,857	SQUIRES ET AL.	
	Examiner	Art Unit	
	Brian M. Healy	2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the application filed 10/22/2003.
2. ☒ The allowed claim(s) is/are 1-26.
3. ☒ The drawings filed on 22 October 2003 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
 - * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date <u>03022005</u> | 7. <input type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |


Brian Healy
Primary Examiner

REASONS FOR ALLOWANCE

The following is an Examiner's Statement of Reasons for Allowance: the closest prior art of record, i.e. Hamel et. al., U.S.P. No. 5,748,815 teaches (Figs.1-6) an optical multiplexer/demultiplexer (and method of wavelength locking using same) comprising: an input optical fiber 68 with a multiwavelength signal (λ_1 , λ_2 , ect.) which are reflected at an optical multiwavelength grating 88,70 at different optical orders to plural optical output fibers 79,80,82,84,72,74,76,78 and a plurality of optical detectors 90,92,94,96 so that different wavelengths can be recovered and/or monitored at a specific optical order. Neither Hamel et. al. 815' or any of the other references or record teaches or suggests comprises the claimed arrangement for wavelength locking each of a single or plurality of radiation sources that generates separate wavelength output signals comprising: a multiplexing/demultiplexing grating device that operates at both zero diffraction order or non-zero diffraction order which receives a multiplexed wavelength output signal (symmetric wavelengths $+\gamma$ $-\gamma$), a plurality of radiation detectors with each radiation detector being coupled to receive a separate one of the symmetric wavelengths and generates an output signal representing the magnitude of the received wavelength output signal and a control device responsive to output signals from each pair of radiation detectors that are coupled to receive the separate wavelength ($+\gamma$) output signals from a separate predetermined one of the plurality of radiation sources, for utilizing a signal ratio of the separate wavelengths ($+\gamma$ $-\gamma$) output signals and generate a separate output control signal to each one of the plurality of radiation sources for locking the separate wavelength output signal

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thereof to a desired wavelength value. The grating can also include first and second free propagation regions (FPR). The grating can be chosen from the group of array waveguide grating, a bulk grating and an Echelle grating. The dependent claims include these limitations as well as other additional limitations (see the dependent claims for specific details). Claims 1-26 of the present application includes patentably distinguishable over the teachings of Hamel '815 and all of the other references of record.

This office action also includes other references listed on PTO-892 which represent the state of the art and claims 1-26 are also patentably distinguishable over same.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. § 103(a), the Examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR § 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the

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Examiner to consider the applicability of 35 U.S.C. § 103(c) and potential 35 U.S.C. §§ 102(e), (f) or (g) prior art under 35 U.S.C. § 103(a).

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure (See list on PTO-892).

All of the prior art documents submitted by applicant in the Information Disclosure Statement filed on October 22, 2003, have been considered and made of record. Note the attached initialed copy of form PTO-1449.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. Healy whose telephone number is (571)272-2347. The examiner can normally be reached on Compressed schedule Tues-Thurs.7AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571)272-2415. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian M. Healy
Primary Examiner
Art Unit 2883



Brian Healy
Primary Examiner